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PN - JP58164173 A 19830929 [JP58164173]
TI - (A) BUTTON TYPE ZINC AIR CELL
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AP - JP4754982 19820324 [1982JP-0047549]
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DT - Basic
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AB - PURPOSE: To provide a sealing material which seals air supply holes of a button type zinc air cell to give a good storage life by using as a sealing material a double sheet formed by combining a resin sheet mainly comprising polyester or polypropylene with humidity-proof resin impregnated paper.
- CONSTITUTION: A sealing material is formed with a sticking layer 11-1, humidity-proof paper obtained by impregnating polypropylene, and a polyester sheet 11-3, and the sticking layer 11-1 is sticked to a positive case 1. Sealing performance of this sealing material at high humidity is substantially improved compared with that of the sealing material obtained by combining a polyester sheet and paper not impregnating resin, and capacity deterioration is also improved. Resin used to impregnate in paper is polyester, fluorine resin, polyester, and others.

Japanese Unexamined Patent Application: 58-164173, September 29, 1983

Title: Button Type Air Cell

Application: March 24, 1982 Sr: 57-47549

Inventors: N. Koshita et al

Applicant: Matsushita Electric Industrial Co.

It relates to a sealing material of air electrode.

A button type air cell such as shown in Fig. 1 has air holes (2), which are sealed when not in use with a covering material such as polyester, polypropylene sheet or polyester laminated with paper. Polyester is commonly used because of its low gas permeability. However, during long-time storage, hydrogen builds up, which sometimes damages the sealing material. Therefore, a meterial which gradually breathes out hydrogen is needed.

In this invention, polyester or polypropylene sheet and paper impregnated with humidity-resistant resin are laminated to make a composite sealing material to cover the air holes of air cells. Referring to Fig. 1 an air cell comprises cathode case (1), air holes (2), diffusion paper (3), water-proof sheet (4), catalyst layer (5), separator (6), electrolyte retainer (7), gasket (8), anode cup (9) and Zn electrode (10). The composite sealing material (11) is composed of adhesive layer (11-1), paper impregnated with polypropylene (11-2), and polyester film (11-3). The polyester sheet (11-3) has thickness of 25μm and the impregnated paper (11-2) is 100μm. When the cells of this invention were compared with those cells covered with polyester and unimpregnated paper, they showed superior shelf life.

Claim: Button type air cell, in which air holes are sealed with a composite sheet made of polyester sheet and paper impregnated with humidity-resistant resin. In said cell, the humidity-resistant resin includes polypropylene, polyethylene, fluoro resin and polyester.

Fig. 1

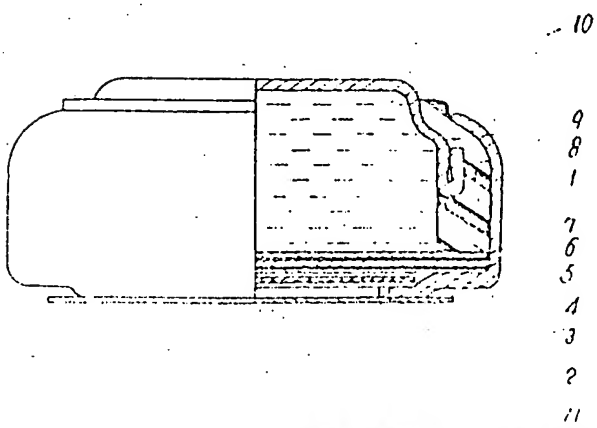

Fig. 2